

## **Remarks**

### ***A. Introduction***

Applicant has carefully reviewed the Office Action mailed December 24, 2008. By this Amendment, claim 1 is amended. Claims 5, 7-8, 10-39, 42-47, 52-69, 71, 73-75, and 78-82 were previously cancelled. Claims 1-4, 6, 9, 40-41, 48-51, 70, 72, 76-77, and 83-90 are currently pending.

Applicant has made this amendment to focus the present application and to advance prosecution in order to obtain allowance at the earliest possible date. Accordingly, no admission may be inferred from this amendment. Applicant expressly reserves the right to pursue the originally filed claims in the future. Additionally, Applicant submits that the amendment made herein introduces no new matter.

### ***B. Statement of Substance of Interview***

The undersigned would like to thank Examiner Brown for extending the courtesy of a personal interview on June 22, 2009 to discuss this case. The following recitation of the substance of the interview is believed to be complete and proper, in accordance with MPEP 713.04. It is requested that Examiner notify the undersigned if Examiner believes this Statement contains any inaccuracies or if Examiner believes this Statement is otherwise not complete and proper.

Interview participants were: (1) Examiner Brown; (2) Dr. Erling Bekkestad Rein, a co-inventor and CEO of Applicant; (3) John Dolan, Applicant's attorney; and (4) the undersigned. Claims 1-4, 6, 9, 40-41, 48-51, 70, 72, 76-77, and 83-90 were discussed during the interview. The prior art of record was discussed during the interview.

Applicant submitted that the claimed methods patentably distinguish over the cited art. The position articulated by Applicant is provided in greater detail below. Applicant provided graphs illustrating the flow of blood using embodiments of the present invention.

Agreement was reached with regard to the pending method claims. Examiner agreed to give favorable consideration to the method claims. Examiner reserved the right to conduct a final search before allowing the method claims.

No other pertinent matters were discussed during the interview.

### **C. Method Claims**

Applicant thanks Examiner for giving favorable consideration to the method claims pending in this application. There are two independent method claims—claims 48 and 50. Claim 48 is a method of treating hypothermia, and claim 50 is a method of treating hyperthermia. Both claim 48 and claim 50 include the following step:

*“generating pulses of negative pressure within the chamber of between -20 mmHg and -80 mmHg (-2.7 kPa and -10.7 kPa), each pulse of negative pressure being generated for between 5 and 15 seconds and released for an interval of between 5 and 10 seconds the pulses of negative pressure and thermal energy in the liquid being transmitted simultaneously to the limb of the patient via the direct contact with the liquid”*

As discussed during the interview, Applicant respectfully submits that the art of record does not disclose this step. Moreover, Applicant further submits that determining the optimum pulses of negative pressure would not have been obvious to one of ordinary skill in the art. Determining the optimum pulses would not have been a matter of choosing from a finite number of identified and predictable options. Between the time interval and the magnitude for both pressure generation and pressure release, one of ordinary skill in the art would have been faced with an infinite number of possible options.

Additionally, Applicant respectfully submits that one of ordinary skill in the art would not have been able to determine the optimum negative pressure pulses by means of obvious experimentation. Applicant used an ultrasound Doppler measuring technique (see paragraphs 51, 114, 129, 131-132) to determine how pressure pulses can be adjusted to provide optimum levels of blood flow/velocity within a local region of a patient. Applicant was the first to use the ultrasound Doppler measuring technique for this purpose. One of ordinary skill in the art would have had to resort to prior

techniques, which would not have enabled him/her to determine the optimum negative pressure pulses.

Accordingly, as discussed in the interview, Applicant submits that independent method claims 48 and 51 (along with dependent method claims 40-41, 49, 51, and 85-90) are patentable over the art of record. Once again, Applicant thanks Examiner for agreeing to give favorable consideration to these claims.

#### ***D. Device Claims***

The pending device claims (1-4, 6, 9, 70, 72, 76, 77, and 83-84) stand rejected as being unpatentable over U.S. Patent No. 3,292,613 ("MacLeod '613"). As Applicant understands the Office Action's reasoning, the previously presented claims were unpatentable because MacLeod '613 disclosed the recited structure and was "capable of providing the recited pressures."

While Applicant does not concede that MacLeod '613 discloses the recited structure, Applicant has amended claim 1 to make clear that more is required than being capable of providing the recited pressures. The claim now further comprises "a computer programmed with instructions for causing the element to" generate and release the recited pressures. Support for this amendment can be found, among other places, in paragraph 112 of the present application's specification.

For reasons similar to those articulated in the previous section, Applicant respectfully submits that the device of MacLeod '613 does not have a computer programmed to provide the recited pressure pulses, nor would it have been obvious to add one. Accordingly, Applicant respectfully requests allowance of amended claim 1, along with the rest of the pending device claims (dependent claims 2-4, 6, 9, 70, 72, 76, 77, and 83-84).

#### ***E. Conclusion***

In view of the foregoing, Applicant respectfully submits that this application stands in condition for allowance. Applicant respectfully requests favorable consideration and prompt allowance. The Commissioner is hereby authorized to charge any additional filing fees required and/or to credit any overpayment to Deposit Account

No. 06-1910. Examiner is invited to telephone the undersigned if believed to be useful to advance prosecution.

Respectfully submitted,

Dated: June 24, 2009

/Thomas R. Hipkins/  
Thomas R. Hipkins, Reg. No. 57,659  
(612) 492-7307

Customer No.: 022859  
Fredrikson & Byron, P.A.  
200 South Sixth Street, Suite 4000  
Minneapolis, MN 55402-1425 USA  
Facsimile: (612) 492-7077

4495323